

Appln. No.: 10/085,910
Amendment dated April 5, 2007
Reply to Office Action of January 9, 2007

REMARKS/ARGUMENTS

The Office Action of January 9, 2007, has been carefully reviewed and these remarks are responsive thereto. Claims 1, 9, 16, 21, 24 and 36 have been amended. Claims 1, 3-42 and 44 remain pending. Reconsideration and allowance of the application are respectfully requested.

Rejections Under 35 U.S.C. § 112

Claims 21 and 36¹ stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. The Office Action at page 4, paragraph 12 alleges that the term quasi-error-free in claims 21 and 36 is a relative term which renders the claim indefinite. Applicants submit that the term quasi-error-free is known to one of skill in the art. The term quasi-error-free is currently in use in Digital Video Broadcasting (DVB), and is defined for example in: ETSI EN 300 744 V1.5.1 (2004-06) - Digital Video Broadcasting (DVB); Framing Structure, Channel Coding and Modulation for Digital Terrestrial Television. Therein, at page 40, Annex A, and Table A.1, quasi-error-free ("QEF") is defined as less than one uncorrected error event per hour (corresponding to a bit error rate ("BER") of about 1E-10 to 1E-11). Given this definition being known to those of ordinary skill in the art, Applicants request that the rejection of claims 21 and 36 be withdrawn.

Rejections Under 35 U.S.C. § 103

Claims 1 and 6-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jonsson (U.S. Pat. No. 5,513,246) in view of Chen (U.S. Pat. No. 6,731,936).

Claims 24-29, 31, 33-35, 41, and 42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jonsson in view of Chen, and further in view of Malek (U.S. Pat. No. 5,822,313).

Claims 3-5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jonsson in view of Chen, and further in view of Ahopelto (U.S. Pat. No. 5,970,059).

¹ The Office Action at page 4, paragraph 11 indicates a rejection of claims 21 and 26 under 35 U.S.C. § 112, however, in view of page 4, paragraph 12, Applicants presume for purposes of this paper that the rejection was intended to apply to claims 21 and 36.

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Claims 21, 23, and 36-38 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Jonsson in view of Chen and further in view of Malek.

Claim 22 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Jonsson in view of Chen and Malek, and further in view of Taketsugu (U.S. Pat. No. 5,420,863).

Claims 9-14, 16, 18-20, and 39 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Jonsson in view of Chen, and further in view of Makinen (U.S. Pat. No. 5,764,700).

Claim 17 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Jonsson in view of Chen and Makinen, and further in view of Doshi (U.S. Pat. No. 5,936,965).

Claim 32 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Jonsson in view of Chen and Malek, and further in view of Doshi.

Claims 40 and 44 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Jonsson in view of Chen and Makinen, and further in view of Malek.

Claim 15 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Jonsson in view of Chen and Makinen, and further in view of Lim (U.S. Pat. No. 6,766,168).

Claim 30 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Jonsson in view of Chen and Malek, and further in view of Lim.

These rejections are traversed for at least the following reasons. Applicants have amended various claims to more clearly indicate that the mobile terminal performs handover operations, as opposed to handover occurring at the direction of other nodes or devices.

Amended independent claim 1 recites, among other features, "*determining at the mobile terminal that said digital video broadcasting signal data from said second wireless transmitter meets a second predefined criterion, the mobile terminal switching reception from said first wireless transmitter to said second wireless transmitter after a first digital video broadcasting signal transmission burst has been received and before a second digital video broadcasting signal transmission burst has been received.*" Jonsson fails to teach or suggest the recited features. In fact, Jonsson teaches away from the recited features. Notably, Jonsson at col. 9, lines 45-53 demonstrates that a weighted average is calculated of down-link (from base station to mobile station) signal strength measurements for a current base station and neighboring base stations and is sent to a mobile services center. Jonsson at col. 9, lines 54 – 59 demonstrates the

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preparation of a cell candidate list wherein monitored cells are qualified and ranked (according to path loss and signal strength). Jonsson at col. 10, lines 3-19 demonstrates *the mobile services center* trying to allocate a channel in each of the better cells in turn in order of their ranking. Thus, Jonsson teaches away from the recited feature of “*determining at the mobile terminal* that said digital video broadcasting signal data from said second wireless transmitter meets a second predefined criterion”, because the determination is made at the mobile services center in Jonsson. Moreover, Jonsson at col. 10, lines 11-25 demonstrates that if a channel is successfully allocated, a handover to the corresponding cell is then attempted, with the present base station waiting to learn the results of the handover attempt and subsequently relinquishing control to the successor base station if the attempt is successful. Notably in Jonsson, the (present) base station and the mobile terminal take on a secondary role with respect to the handover operation, with the mobile services center directing the effort. Thus, Jonsson teaches away from the recited feature of “*the mobile terminal switching* reception from said first wireless transmitter to said second wireless transmitter.” Furthermore, Jonsson fails to teach or suggest features related to “*switching* reception from said first wireless transmitter to said second wireless transmitter *after a first digital video broadcasting signal transmission burst has been received and before a second digital video broadcasting signal transmission burst has been received*” as recited. Jonsson is silent with respect to such features.

Chen fails to cure all of the above noted deficiencies of Jonsson. For example, Chen (Abstract) is directed to a method and system for a handoff in a broadcast communication system. Chen at col. 4, lines 21-41 demonstrates that the basic model of a broadcast system consists of a broadcast net of users served by one or more central stations, which transmit information with certain contents (e.g., news, movies, sports events and the like) to the users. Chen at col. 4, lines 42-57 demonstrates that because broadcast transmission is intended for many subscriber stations, a base station cannot synchronize transmission for each subscriber station desiring to handoff due to the high signaling load that would result. Chen at col. 7, lines 57-59 demonstrates a sector soft handoff (SHO) group consisting of a group of all base stations transmitting a common broadcast forward link synchronously. Notably, Chen at col. 8, lines 44-48 demonstrates that during the process of a handoff, a subscriber station is able to combine

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synchronous transmissions of multiple sectors. Thus, Chen teaches away from the features of *"switching reception from said first wireless transmitter to said second wireless transmitter after a first digital video broadcasting signal transmission burst has been received and before a second digital video broadcasting signal transmission burst has been received"* as recited. Instead, Chen demonstrates combining the transmissions from multiple sectors when switching reception from said first wireless transmitter to said second wireless transmitter (i.e., during handoff) as recited. Applicants submit that the motivation in Chen is to enable continuous broadcast transmission, free of interruptions; this is what motivated Chen (col. 4, lines 21-57) to avoid handoff based on base station-subscriber station signaling to begin with. Thus, Chen fails to teach or suggest the features as recited. Applicants submit that Chen is directed to providing a continuous broadcast to the subscriber stations, and that the incorporation of the recited features would frustrate these performance objectives of Chen. Thus, notwithstanding whether the combination of Jonsson and Chen is proper, the combination, even if proper, would not result in all of the features recited in claim 1. Claim 1 is allowable for at least these reasons.

Dependent claims 6-8, which depend from claim 1, are allowable for at least the same reasons as claim 1.

Independent claim 24 recites, among other features, a mobile terminal comprising "a digital broadcast receiver configured to receive at least a first portion of the digital video broadcasting information as a first transmission burst." The Office Action at page 7 alleges that Jonsson at col. 7, lines 20-48 demonstrates the recited features. Applicants respectfully disagree. Notably, the cited passages in Jonsson (col. 7, lines 20-48) refer to Fig. 2, which is a representation of a *base station* in a cellular mobile radio system. See Jonsson at col. 5, lines 40-41. Thus, the cited portions of Jonsson fail to teach or suggest a *mobile terminal* comprised of a digital broadcast receiver as recited. Moreover, Applicants submit that the receiver in Jonsson is not configured to receive at least a first portion of the digital video broadcasting information as a first transmission burst, as recited, for example, in claim 24. Jonsson, instead, describes only conventional cellular phone technology, with no mention of using its system with digital video broadcasting. Incidentally, the Office Action (in the Response to Arguments) at page 2, paragraph 4 seems to suggest that even if Jonsson fails to teach or suggest the recited features,

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that the features are taught by Chen. Applicants submit that Chen fails to teach or suggest the recited features as well. As discussed above with respect to claim 1, Chen teaches away from receiving at least a first portion of the digital video broadcasting information as a first transmission *burst*, as recited. Malek fails to cure the above noted deficiencies of Jonsson and Chen. Thus, notwithstanding whether the combination of Jonsson, Chen, and Malek is proper, the combination fails to result in all of the features recited in claim 24. Claim 24 is allowable for at least these reasons.

Dependent claims 25-29, which each depend from claim 24, are allowable for at least the same reasons as claim 24.

Independent claim 31 recites features similar to those described above with respect to claim 24, and is allowable for at least those same reasons. Moreover, independent claim 31 recites features similar to those recited in claim 1, and is allowable for at least those additional reasons, because Malek fails to cure the above noted deficiencies of Jonsson and Chen with respect to claim 1.

Dependent claims 33-35, 41, and 42, which each depend from at least one of claims 1 and 31, are allowable for at least the same reasons as their respective base claims.

Ahopelto fails to cure the above noted deficiencies of Jonsson and Chen with respect to claim 1. Thus, notwithstanding whether the combination is proper, the combination fails to result in the features recited in claim 1. Dependent claims 3-5, which each depend from claim 1, are allowable for at least the same reasons as claim 1.

Independent claim 21 recites, among other features, "the mobile terminal deriving a first bit error rate for digital video broadcasting information received from said first wireless transmitter; when said first bit error rate for said first wireless transmitter is greater than a predefined *quasi-error-free* value, the mobile terminal deriving a second bit-error-rate for a second wireless transmitter." The Office Action at pages 11-12 fails to indicate how the combination of Jonsson, Chen, and Malek allegedly demonstrates the recited features as they relate the recited first bit error rate and second bit error rate to the recited quasi-error-free value. Applicants presume that the Office elected to ignore these features in view of the 35 U.S.C. § 112 based rejection. See Office Action at page 4, paragraphs 10-12. Applicants have already

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discussed herein why the 35 U.S.C. § 112 based rejection should be withdrawn. Applicants submit that the combination of Jonsson, Chen, and Malek fails to teach or suggest the features noted above as recited in claim 21. Thus, notwithstanding whether the combination is proper, the combination fails to teach or suggest all of the features as recited in claim 21. Claim 21 is allowable for at least these reasons.

Dependent claim 23, which depends from claim 21, is allowable for at least the same reasons as claim 21.

Independent claim 36 recites features similar to those described above with respect to claim 21. Claim 36 is allowable for at least those same reasons.

Dependent claims 37 and 38, which each depend from claim 36, are allowable for at least the same reasons as claims 36.

Taketsugu fails to cure the above noted deficiencies of Jonsson, Chen, and Malek with respect to claim 21. Thus, notwithstanding whether any combination of the references is proper, the resultant combination fails to result in the features of claim 21. Dependent claim 22, which depends from claim 21, is allowable for at least the same reasons as claim 21.

Independent claim 9 recites, among other features, "a digital broadcast receiver suitable for receiving digital video broadcasting information from a plurality of wireless transmitters, wherein said digital broadcast receiver is configured to receive from a first transmitter at least a first portion of the digital video broadcasting information as a first transmission burst." These features are similar to those described above with respect to claim 24. Makinen fails to cure the above noted deficiencies of Jonsson, Chen, and Malek with respect to claim 24. Thus, notwithstanding whether any combination of Jonsson, Chen, Malek and Makinen is proper, the combination fails to result in the features as recited in claim 9. Claim 9 is allowable for at least these reasons.

Dependent claims 10-14, which each depend from claim 9, are allowable for at least the same reasons as claim 9.

Independent claim 16 recites features similar to those described above with respect to claim 9. Claim 16 is allowable for at least those same reasons.

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Dependent claims 18-20 and 39, which each depend from claim 16, are allowable for at least the same reasons as claim 16.

Dependent claim 17 is allowable for at least the same reasons as claim 16 from which it depends, because, notwithstanding whether any combination of Jonsson, Chen, Makinen, and Doshi is proper, Doshi fails to cure the above noted deficiencies of Jonsson, Chen and Makinen with respect to claim 16.

Dependent claim 32 is allowable for at least the same reasons as claim 31 from which it depends, because, notwithstanding whether any combination of Jonsson, Chen, Malek, and Doshi is proper, Doshi fails to cure the above noted deficiencies of Jonsson, Chen, and Malek with respect to claim 31.

Dependent claim 40 is allowable for at least the same reasons as claim 16 from which it depends, because, notwithstanding whether any combination of Jonsson, Chen, Makinen, and Malek is proper, Malek fails to cure the above noted deficiencies of Jonsson, Chen, and Makinen with respect to claim 16.

Dependent claim 44 is allowable for at least the same reasons as claim 9 from which it depends, because, notwithstanding whether any combination of Jonsson, Chen, Makinen, and Malek is proper, Malek fails to cure the above noted deficiencies of Jonsson, Chen, and Makinen with respect to claim 9.

Dependent claim 15 is allowable for at least the same reasons as claim 9 from which it depends, because, notwithstanding whether any combination of Jonsson, Chen, Makinen, and Lim is proper, Lim fails to cure the above noted deficiencies of Jonsson, Chen, and Makinen with respect to claim 9.

Dependent claim 30 is allowable for at least the same reasons as claim 24 from which it depends, because, notwithstanding whether any combination of Jonsson, Chen, Malek, and Lim is proper, Lim fails to cure the above noted deficiencies of Jonsson, Chen and Malek with respect to claim 24.

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CONCLUSION

All rejections having been addressed, Applicants respectfully submit that the instant application is in condition for allowance, and respectfully solicit prompt notification of the same. However, if for any reason the examiner believes the application is not in condition for allowance or there are any questions, the examiner is requested to contact the undersigned at (202) 824-3153.

Respectfully submitted,

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